

In the Claims:

1. (Currently Amended) A method of providing custom calling party identification (CID), the method comprising:

determining that customized CID information is desired by a call originator for a call originating from an originating end-point, wherein the customized CID information corresponds to a unique name selected by the call originator from a plurality of unique names; and

providing the customized CID information in association with the call;
wherein a device receiving the call can receive the customized CID information.

2. (Currently Amended) The method of claim 1 wherein the step of determining comprises determining whether a number dialed for the call matches a stored number, said stored number designated by the call originator as being associated with the customized CID information associated with the origination end point.

3. (Currently Amended) The method of claim 2 wherein the stored number is associated with custom CID information, and wherein the step of providing comprises:

setting a CID message in accordance with the custom CID information; and
transmitting the CID message as the customized CID information.

4. (Original) The method of claim 3 wherein the custom CID information includes at least one of a custom name value and a custom number value, and wherein the step of setting comprises setting at least one of a generic name portion and a generic number portion in the CID message to the custom name and number values, respectively.

5. (Original) The method of claim 4 further comprising maintaining fixed CID information in the CID message uniquely identifying the origination end-point for call record purposes.

6. (Currently Amended) The method of claim 2 wherein at least one list of stored numbers generated by the call-originator is associated with the origination end-point, each of the at least one list having corresponding custom CID information selected from the plurality of unique names, and wherein the step of providing comprises:

setting a CID message in accordance with the custom CID information corresponding to one of the at least one lists of stored numbers having a matching number with respect to the number dialed; and
transmitting the CID message.

7. (Currently Amended) The method of claim 6 wherein the at least one list of stored numbers is stored in a local exchange switch associated with the origination end-point, and further comprising accessing a database to retrieve custom CID information if a match exists between a dialed number and a number in the number dialed and one of the at least one list of stored numbers.

8. (Original) The method of claim 7 wherein the step of accessing the database comprises accessing a local database associated with the local exchange switch.

9. (Original) The method of claim 7 wherein the step of accessing the database comprises accessing a remote database associated with a telecommunications network.

10. (Original) The method of claim 9 wherein the step of accessing the remote database comprises using SS7 signaling to access and query the remote database.

11. (Original) The method of claim 9 wherein the step of accessing the remote database comprises using advanced intelligent network signaling to access and query the remote database.

12. (Currently Amended) The method of claim [[10]] 9 wherein the step of accessing the remote database comprises using Internet Protocol signaling to access and query the remote database through the Internet.

13. (Original) The method of claim 1 wherein the step of determining comprises receiving a feature code indicating a desire for the customized CID information from customer premises equipment (CPE) associated with the origination end-point.

14. (Original) The method of claim 1 wherein the step of determining comprises receiving a feature code indicating a desire for the customized CID information.

15. (Original) The method of claim 13 further comprising receiving custom CID information from the CPE in association with the feature code for use in the customized CID information provided in association with the call.

16. (Currently Amended) The method of claim 13 further comprising maintaining the customized CID information for subsequent calls originated from the origination end-point until receiving a new feature code bearing [[a]] on use of changed customized CID information.

17. (Original) The method of claim 13 further comprising retrieving custom CID information from a database for use in the customized CID information in response to receiving the feature code.

A3
18-25. (Canceled)

26. (Currently Amended) A computer readable media comprising software for instructing a telecommunications computer system to:

determine that customized CID information is desired by a call originator for a call originating from an originating end-point, wherein the customized CID information corresponds to a unique name selected by the call originator from a plurality of unique names; and

provide the customized CID information in association with the call.

27. (Currently Amended) The computer readable media comprising software of claim 26 wherein the instruction to determine that customized CID information is desired comprises instructions to:

receive dialed number information for the call; and

determine whether the dialed number information matches stored number information, said stored number information comprising a number designated by the call originator as being associated with the customized CID information associated with the origination end-point.

28. (Original) The computer readable media comprising software of claim 27 wherein the telecommunications computer system is a local exchange switch associated with the origination end-point and the stored number information is a screen list stored in the local exchange switch for the origination end-point, and further wherein the instruction to determine whether the dialed number information matches stored number information comprises instructions to compare the dialed number information with the stored number information in the screen list, wherein the stored number information includes at least one dialable number for which customized CID information is desired.

29. (Original) The computer readable media comprising software of claim 27 wherein the telecommunications computer system is a local exchange switch associated with the origination end-point and the stored number information matching the number dialed has at least one of a corresponding stored custom name value and a corresponding stored custom number value, and further wherein the instruction to provide the customized CID information in association with the call comprises instructions to:

retrieve at least one of the corresponding stored name custom name values and stored custom number values; and

transmit the customized CID information including the at least one of the corresponding stored name and stored number values.

30. (Original) The computer readable media comprising software of claim 29 wherein the instruction to retrieve at least one of the corresponding stored name custom name values and stored custom number values comprises instructions to access a remote database through an advanced intelligent network.

31. (Original) The computer readable media comprising software of claim 29 wherein the instruction to retrieve at least one of the corresponding stored name and stored number values comprises instructions to access a remote database through an SS7 network.

32. (Original) The computer readable media comprising software of claim 29 wherein the instruction to retrieve at least one of the corresponding stored name and stored number values comprises instructions to access a remote database through the Internet.

33. (Original) The computer readable media comprising software of claim 29 for further instructing the telecommunications computer system to:

support a user programming interface; and

receive dialable number information for storage as the stored number information from a user via the user programming interface.

34. (Original) The computer readable media comprising software of claim 33 for further instructing the telecommunications computer system to:

receive at least one of desired name and number values for storage as the corresponding stored custom name and number values.

35. (Original) The computer readable media comprising software of claim 29 for further instructing the telecommunications computer system to:

support a user programming interface via customer premises equipment (CPE) connected to the origination end-point; and

receive dialable number information for storage as the stored number information from a user via the user programming interface.

36. (Original) The computer readable media comprising software of claim 26 wherein the instruction to determine that customized CID information is desired for a call originating from an origination end-point comprises instructions to determine if a feature code corresponding to a desire for customized CID information is received in advance of the call.

37. (Original) The computer readable media comprising software of claim 36 for further instructing the telecommunications computer system to:

receive selection information in conjunction with the feature code; and

select at least one of a desired custom name value and a desired custom number value corresponding to the selection information for use in the customized CID information.

38. (Currently Amended) An apparatus facilitating provision of custom calling party identification (CID) comprising:

a means for selectively interconnecting a plurality of origination end-points in support of telecommunications functions based on dialable number information entered via individual ones of the plurality of origination end-points;

a means for determining that customized CID information is desired by a call originator for a call originating from a given one of the plurality of origination end-points, wherein the customized CID information corresponds to a unique name selected by the call originator from a plurality of unique names;

a means for determining at least one custom value for use as at least a part of the customized CID information; and

a means for transmitting the custom CID information in association with the call.

39. (Currently Amended) The apparatus of claim 38 wherein the means for determining that customized CID information is desired for a call originating from a given one of the plurality of origination end-points comprises a means for determining whether a number dialed for the call matches one in a predefined list of stored numbers, said stored numbers comprising a plurality of numbers designated by the call originator as being associated with the customized CID information.

40. (Original) The apparatus of claim 39 wherein the means for determining at least one custom value for use as at least a part of the customized CID information comprises a means for retrieving the at least one custom value from a database.

41. (Original) The apparatus of claim 38 wherein the means for determining that customized CID information is desired for a call originating from a given one of the plurality of origination end-points comprises a means for determining whether a feature code indicating a desire for the customized CID information is received in advance of the call.

42. (Original) The apparatus of claim 41 wherein the means for determining at least one custom value for use as at least a part of the customized CID information comprises a means for receiving at least one of a custom name value and a custom number value in association with the feature code received through the origination end-point.

43. (Original) The apparatus of claim 41 wherein selection information is received in association with the feature code and the means for determining at least one custom value for use as at least a part of the customized CID information comprises a means for accessing a database to retrieve the at least one custom value based on the selection information.

44. (Original) The apparatus of claim 43 wherein the means for accessing the database comprises a means for communicating with a remote database via an SS7 network.

45. (Original) The apparatus of claim 43 wherein the means for accessing the database comprises a means for communicating with a remote database via an advanced intelligent network.

46. (Original) The apparatus of claim 43 wherein the means for accessing the database comprises a means for communicating with a remote database via an internet.

47. (Currently Amended) A telecommunications local exchange switch comprising:

a first interface for connecting with a plurality of origination end-points;

a second interface for connecting with a telecommunications network;

a switching system operatively associated with the first and second interfaces for selectively interconnecting individual ones of the origination end-points, and for selectively connecting individual ones of the origination end-points with the telecommunications network;
and

a controller for supporting overall operations of the telecommunications local exchange switch in accordance with program instructions and operating data;

said controller adapted to selectively provide customized CID information in association with calls originating from at least one of the plurality of origination end-points based on the

program instructions and operating data, wherein the customized CID information corresponds to a unique name selected by the call originator from a plurality of unique names.

48. (Currently Amended) The telecommunications local exchange switch of claim 47 wherein the controller selectively provides the customized CID information based on determining whether a number dialed in association with a call originating from the at least one origination end-point matches one in a predefined list of stored numbers, said stored numbers comprising numbers designated by the call originator as being associated with the customized CID information.

49. (Original) The telecommunications local exchange switch of claim 47 wherein the controller determines at least one custom value for the customized CID information based on retrieving the at least one custom value from a database associated with the telecommunications local exchange switch.

50. (Original) The telecommunications local exchange switch of claim 49 wherein the controller is further adapted to access the database via a SS7 network.

51. (Original) The telecommunications local exchange switch of claim 49 wherein the controller is further adapted to access the database via an internet.

52. (Original) The telecommunications local exchange switch of claim 49 wherein the controller is further adapted to access the database via an advanced intelligent network.

53. (Original) The telecommunications local exchange switch of claim 47 wherein the controller determines that the customized CID information is desired for a call originating from a given one of the plurality of origination end-points based on determining whether a feature code indicating a desire for the customized CID information is received through the origination end-point in advance of the call.

54. (Original) The telecommunications local exchange switch of claim 53 wherein the controller determines at least one custom value for the customized CID information based on information received through a telephony line in association with the feature code.

55. (Original) The telecommunications local exchange switch of claim 53 wherein the controller determines at least one custom value for the customized CID information based on selection information received in association with the feature code that is used in accessing a database associated with the telecommunications local exchange switch to retrieve the at least one custom value.

56. (Original) A method of providing custom calling|party identification (CID) information, the method comprising:

determining that customized CID information is desired for a call originating from an originating end-point;

comparing the customized caller CID information with inappropriate CID information;
and

providing the customized CID information in association with the call if the customized CID information does not match the inappropriate CID information;

wherein a device receiving the call can receive the customized CID information.

57. (New) A method of providing customized calling party identification (CID) information to a called party, the method comprising:

allowing callers associated with a single line subscription to generate a plurality of customized CIDs associated with the single line subscription;

allowing the callers to designate a designated CID from the plurality of customized CIDs, the designated CID selected to be used when a call is made from a telecommunications line associated with the single line subscription; and

passing the designated CID to a call recipient.

58. (New) The method of claim 57 wherein allowing callers to designate a designated CID from the plurality of customized CIDs comprises designating through a feature code.

59. (New) The method of claim 57 wherein allowing callers to designate a designated CID from the plurality of customized CIDs comprises the callers designating the designated CID by a dialed number.

60. (New) The method of claim 59 further comprising allowing the callers associated with the single line subscription to designate different lists of dialed numbers and associate different ones of the customized CIDs with the different lists such that when a number is dialed and is on a list, the customized CID associated with that list is provided to the call recipient.

61. (New) The method of claim 57 wherein allowing callers associated with a single line subscription to generate a plurality of customized CIDs associated with the single line subscription comprises allowing customer to generate a plurality of customized CIDS through a packet based network.

62. (New) The method of claim 57 further comprising screening each of the plurality of customized CIDs for appropriate material.

63. (New) The method of claim 57 further comprising maintaining a record CID associated with the single line subscription such that regardless of the CID provided to the call recipient a service provider may bill the single line subscription appropriately.